

New Species of *Fusinus*  
(Gastropoda : Fasciolaridae)  
from the Tropical Eastern Pacific

BY

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(1 Plate; 8 Text figures)

A RECENT EXAMINATION of molluscan material at the Los Angeles County Museum of Natural History and in several large private collections has revealed 5 previously unrecognized species. They are described herein.

Current sub-generic grouping within *Fusinus* is somewhat unsatisfactory. Therefore, placement below the genus level will not be attempted.

*Fusinus* Rafinesque, 1815

A new name for *Fusus* Lamarck, 1799.

Type species: *Murex colus* Linnaeus (by M).

Shell large, spindle-shaped; canal long, open; aperture ovate, outer lip lirate within, columella with callus deposit; sculpture of spiral cords and threads crossing axial ribs.

*Fusinus consagensis* Poorman, spec. nov.

(Figures 1, 6 and 10)

Shell fusiform, of medium size for the genus. Protoconch blunt, of  $1\frac{1}{2}$  turns with the tip immersed and with fine axial riblets and spiral threads appearing on the last  $\frac{1}{2}$  turn. Early whorls of the teleoconch with about 10 strong, low, rounded axial ribs, interspaces narrow; ribs crossed by 2 strong spiral cords in prominent crests; several fine threads above and below the cords. By the 5<sup>th</sup> whorl, upper cord dominant and outline of whorl angulate, slightly convex above and below and marked by about 5 spiral threads. Below the suture, a shallow sulcus extends all the way to

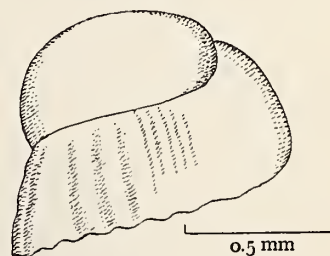


Figure 6

Protoconch of *Fusinus consagensis* Poorman, spec. nov.  
× 50

the aperture. Body whorl large, axial ribs and peripheral cords weak, obsolete on the gerontic stage. Outer lip thin, flaring, serrated, with numerous weak lirations within. Columellar callus thin, underlying cords visible. Body whorl constricted around the base, pinching in the outer lip opposite a heavy callus deposit on the columella. Canal long, narrowly open to the right, bent strongly to the left, terminating with a distal flexure. Color tan with brown maculations between the ribs, aperture white. Periostracum thin, non-fibrous.

Radula: 1-R-1.

Type locality: off Consag Rock, Gulf of California;  $31^{\circ}07'N$  Lat.,  $114^{\circ}30'W$  Long.; 56 specimens dredged in 20-30 m on sand.

Holotype: Los Angeles County Museum of Natural History no. 1934.

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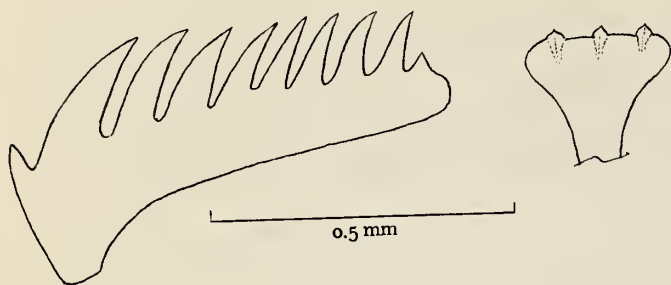


Figure 10

Radula of *Fusinus consagensis* Poorman, spec. nov.  
× 100

the subdued quality of the sculpture on the later stages, the disproportionately large body whorl, the narrow canal bent to the left, and the pinched-in outer lip at the lower part of the aperture.

*Fusinus humboldti* Poorman, spec. nov.

(Figures 2, 7 and 11)

Shell small and narrow for the genus, of 7 whorls and a long canal. Height of spire less than aperture plus canal. Protoconch (eroded) small, turbinate, about 3 turns, with a slight basal carina. Whorls rounded, with a constricted wavy suture, and with 7 high, broadly rounded axial ribs aligned up the spire. Ribs crossed by 3 heavy spiral cords in prominent nodes; 5 cords on the body whorl and about 10 lesser threads on the pillar; several very weak threads between the major cords. Aperture oval, outer lip thin, about 10 lirations within. Columellar callus thin, with several weak plications at the lower part of the aperture. Canal open to the right, extending to the left of the shell axis. Color white.

Radula: 1-R-1.

**Dimensions of the Holotype:** Height 68.7 mm, maximum diameter 23.4 mm.

**Paratypes:** 1 paratype is at the American Museum of Natural History, catalogue no. 198963; 1 paratype is at the National Museum of Natural History, Smithsonian Institution, catalogue no. 784586; 35 paratypes are in the Helen DuShane Collection; 2 paratypes are in the Carl and Laura Shy Collection; 16 paratypes are in the Leroy and Forrest Poorman Collection.

Numerous lots of *Fusinus consagensis* have been examined. All were taken from sand in 20-30 m in the Gulf of California north of Tiburon Island. Beach specimens are not uncommon from Cholla Bay, Sonora, and San Felipe, Baja California Norte.

The specific name is derived from the type locality, Consag Rock, in the upper Gulf of California, which in turn was named for Fernando Consag, an early explorer-missionary.

**Remarks:** The protoconch and the radula place this new species near to *Fusinus ambustus* (Gould, 1853). In both the young and the adult stages, there is 1 more cusp on the lateral tooth of the new species. In other respects, it is unique from any recognized Eastern Pacific fusinid, being easily determined by: the angulate outline of the whorls,

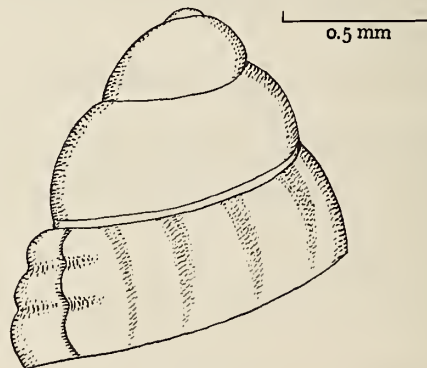


Figure 7

Protoconch of *Fusinus humboldti* Poorman, spec. nov.  
× 50

### Explanation of Figures 1 to 5

- Figure 1: Holotype of *Fusinus consagensis* Poorman, spec. nov. × 1  
 Figure 2: Holotype of *Fusinus humboldti* Poorman, spec. nov. × 3  
 Figure 3: Holotype of *Fusinus magnapex* Poorman, spec. nov. × 2.8  
 Figure 4: Holotype of *Fusinus paulus* Poorman, spec. nov. × 3  
 Figure 5: Holotype of *Fusinus sonorae* Poorman, spec. nov. × 1.1



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5





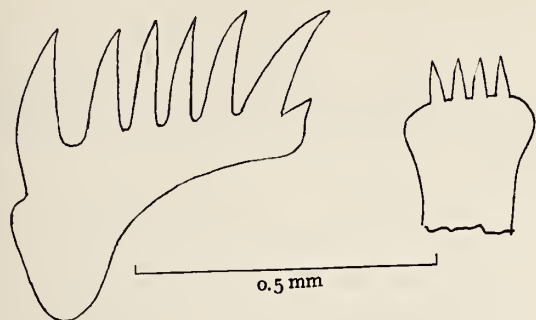


Figure 11

Radula of *Fusinus humboldti* Poorman, spec. nov.  
× 100

**Type locality:** off Duncan Island, Galápagos Islands, Ecuador;  $00^{\circ}35'S$  Lat.,  $90^{\circ}40'W$  Long.; 5 specimens dredged in 400 m.

**Holotype:** Los Angeles County Museum of Natural History no. 1935.

**Dimensions of the Holotype:** Height 22.1 mm, maximum diameter 8.9 mm.

**Paratypes:** 1 paratype is at the American Museum of Natural History, catalogue no. 198964; 2 paratypes are at the Los Angeles County Museum of Natural History, nos. 1943 and 1944; 1 paratype is at the National Museum of Natural History, Smithsonian Institution, catalogue no. 784585.

The species is known only from the Galápagos Islands. There is one other record of 2 specimens dredged off Floreana Island.

The specific name is in recognition of the German naturalist-explorer, Alexander von Humboldt.

**Remarks:** In terms of shell morphology, this species is very close to *Fusinus paulus* described herein. *Fusinus humboldti* differs in being more slender and in having a proportionately longer canal. Also, the outer lip is lirate within. The major difference, however, is in radula morphology. The angular shoulder of the rachidian tooth and the deep basal cusp of the lateral tooth of *F. humboldti* are unique in Eastern Pacific *Fusinus*.

*Fusinus magnapex* Poorman, spec. nov.

(Figures 3, 8 and 12)

Shell small, fusoid; spire equal to aperture plus canal in height. First turn of protoconch large, sharply tilted, tip immersed; second turn slightly larger, flat-sided. Beginning of adult sculpture eroded. Spire of 6 whorls increasing regularly to a large body whorl. Aperture oval; outer lip sharp and serrated, about 7 lirations within. Columellar wall with light callus but with a heavy deposit before the juncture with the canal. Canal short, broadly open to the right, angling slightly to the left of the shell axis. Axial sculpture of 8 strong rounded ribs equal in width to interspaces, aligned up the spire. Spiral sculpture of 7 strong cords overriding the ribs in crested nodes, the 3 at the periphery strongest; weaker threads on the shoulder and down the pillar; with a few intercalary threads between the major cords. Color white; regions above and below the 3 peripheral cords red brown, strongest on the shoulders of the ribs.

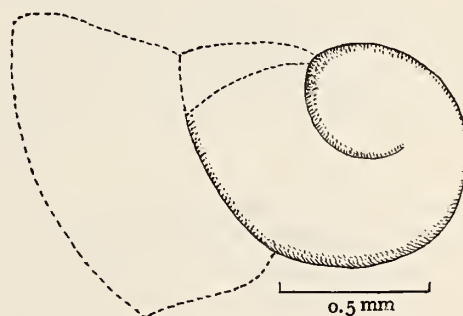


Figure 8

Protoconch of *Fusinus magnapex* Poorman, spec. nov.  
× 50

**Radula:** 1-R-1.

**Type locality:** WSW of Todos Santos, outer coast of Baja California Sur, Mexico;  $23^{\circ}20'N$  Lat.,  $110^{\circ}22'W$  Long.; 4 specimens dredged in 160-220 m.

**Holotype:** Los Angeles County Museum of Natural History no. 1936.

**Dimensions of the Holotype:** Height 25.4 mm, maximum diameter 10.8 mm.

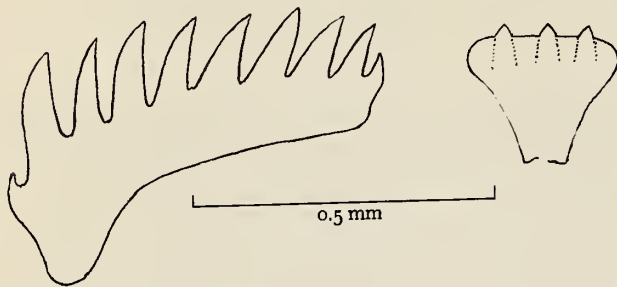


Figure 12

Radula of *Fusinus magnapex* Poorman, spec. nov.  
× 100

**Paratypes:** 3 paratypes are at the Los Angeles County Museum of Natural History, nos. 1945, 1946, and 1947.

One other lot of 2 specimens has been dredged in 150 m some 15 km NE of the type locality.

The specific name is in reference to the disproportionately large protoconch.

**Remarks:** This new species superficially resembles a small specimen of *Fusinus ambustus*. It differs radically in having such a large protoconch with a tilted first turn, and in being proportionately shorter and stouter. Also, it is unique in having so many cusps on the lateral tooth of such a small animal.

*Fusinus paulus* Poorman, spec. nov.

(Figures 4, 13)

Shell small, stout, solid, with about 6 whorls; height of the spire equal to the aperture plus the canal. Protoconch eroded (probably turbinate). Adult sculpture begins abruptly with fine axial ribs and spiral cords. Axial sculpture of 8 rounded ribs aligned up the spire. Spiral sculpture of 3 strong cords on the periphery of each rounded whorl, crossing the ribs as high elongated nodes, several weak threads below the suture and between the cords; about 6 smaller cords on the pillar. Aperture ovate, constricted below by columellar callus. Outer lip thin and crenulated,

without internal lirations. A low cord of callus begins on the parietal wall and spirals into the aperture to the left of the suture. Canal short, open, starting left from aperture and curving right to end on shell axis. Animal color (dried) pale yellow; shell color white; fibrous periostracum yellow-beige.

**Radula:** 1-R-1.

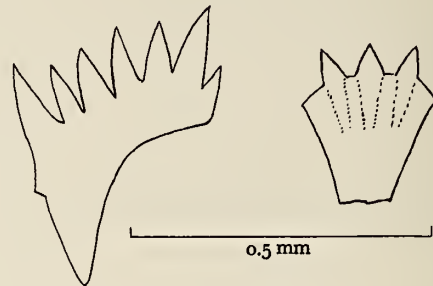


Figure 13

Radula of *Fusinus paulus* Poorman, spec. nov.  
× 100

**Type locality:** San Jaime Bank, W of Cabo San Lucas, Baja California Sur, Mexico; 22°50'N Lat., 110°15'W Long.; 6 specimens dredged in 150 m on rock.

**Holotype:** Los Angeles County Museum of Natural History, no. 1938.

**Dimensions of the Holotype:** Height 19.2 mm (nucleus eroded), maximum diameter 7.7 mm.

**Paratypes:** 4 paratypes are at the Los Angeles County Museum of Natural History, nos. 1939, 1940, 1941, and 1942; 1 paratype is at the National Museum of Natural History, Smithsonian Institution, catalogue no. 784588.

*Fusinus paulus* is known only from the type locality.

The specific name was chosen to call attention to the small size of this stoutly solid shell.

**Remarks:** This new species superficially resembles *Fusinus humboldti* described herein. It differs from the Galapagan species in having a broader, more open canal, in radular variations, in being smooth within the outer lip, and in having an internal cord of callus at the top of the aperture.